circuit is not considered to be within the provisions of this paragraph.

- (c) Operational fixed stations may communicate with units of associated mobile stations only on a secondary basis
- (d) Operational fixed stations licensed in the Industrial/Business Pool may communicate on a secondary basis with associated base stations licensed in these services when:
- (1) The messages to be transmitted are of immediate importance to mobile stations; or
- (2) Wireline communications facilities between such points are inoperative, economically impracticable, or unavailable from communications common carrier sources. Temporary unavailability due to a busy wireline circuit is not considered to be within the provisions of this paragraph.
- (e) Travelers' Information Stations are authorized to transmit certain information to members of the traveling public (see § 90.242).
- (f) CMRS Licensees in the SMR categories of part 90, subpart S, CMRS providers authorized in the 220 MHz service of part 90, subpart T, CMRS paging operations as defined by part 90, subpart P and for-profit interconnected business radio services with eligibility defined by section 90.75 are permitted to utilize their assigned spectrum for fixed services on a co-primary basis with their mobile operations.

[61 FR 45356, Aug. 29, 1996, as amended at 62 FR 18933, Apr. 17, 1997]

§ 90.421 Operation of mobile units in vehicles not under the control of the licensee.

Mobile station transmitters may be installed in vehicles operated by persons other than the licensee as provided in the following paragraphs when necessary for the licensee to meet his requirements in connection with the activities for which he is licensed. The number of units so installed, together with units installed in vehicles operated by the licensee, must not exceed the number of mobile units authorized to the licensee. When an insufficient number of units is licensed to cover such additional units, the license must be modified to add a sufficient number of mobile units. The licensee is responsible for taking any necessary precaution to effectively eliminate the possibility of unauthorized operation of transmitters when not under the control of the licensee.

- (a) Public Safety Pool. (1) Mobile units licensed in the Public Safety Pool may be installed in any vehicle which in an emergency would require cooperation and coordination with the licensee, and in any vehicle used in the performance, under contract, of official activities of the licensee. This provision does not permit the installation of radio units in non-emergency vehicles that are not performing governmental functions under contract but with which the licensee might wish to communicate.
- (2) Additionally, units may be installed in the following:
- (i) Vehicles of contractors or other persons having a direct responsibility for official highway activities;
- (ii) Vehicles of forestry cooperators, and persons having a direct responsibility in the prevention, detection, and suppression of forest fires; and
- (iii) Mobile units licensed under §90.20(a)(2)(iii) may be installed in a vehicle or be hand-carried for use by any person with whom cooperation or coordinations is required for medical services activities.
- (b) *Industrial/Business Pool.* Mobile units licensed in the Industrial/Business Pool may be installed in the following:
- (1) Vehicles of persons furnishing under contract to the licensee and for the duration of the contract, a facility or service directly related to the activities of the licensee;
- (2) Vehicles operated by an organization or association comprised of interconnected electric utilities forming interconnections, power pools, or groups;
- (3) Vehicles of persons furnishing a private emergency road service to its members pursuant to a contract with the association; and
- (4) Vehicles operated by organizations providing, under contract, facilities or service in connection with railroad operation or maintenance including pickup, delivery, or transfer between stations of property shipped, continued in, or destined for shipment by railroad common carrier. Parties to

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the contract must comply with the provisions of §90.179.

(c) In addition to the above, frequencies assigned to licensees in the Private Land Mobile Radio Services may be installed in the facilities of those who assist the licensee in emergencies and with whom the licensee must communicate in situations involving imminent safety to life or property.

[43 FR 54791, Nov. 22, 1978, as amended at 44 FR 50603, Aug. 29, 1979; 47 FR 19539, May 6, 1982; 47 FR 42751, Sept. 29, 1982; 61 FR 6576, Feb. 21, 1996; 62 FR 18933, Apr. 17, 1997]

§ 90.423 Operation on board aircraft.

- (a) Except as provided in paragraphs (b), (c), and (d) of this section, and except as may be provided in other sections of this part with respect to operation on specific frequencies, mobile stations first authorized after September 14, 1973, under this part may be operated aboard aircraft for air-to-mobile, air-to-base, air-to-air and air-to-ship communications subject to the following:
- (1) Operations are limited to aircraft that are regularly flown at altitudes below 1.6 km (1 mi) above the earth's surface:
- (2) Transmitters are to operate with an output power not to exceed ten watts;
- (3) Operations are secondary to landbased systems;
- (4) Such other conditions, including additional reductions of altitude and power limitations, as may be required to minimize the interference potential to land-based systems.
- (b) Exceptions to the altitude and power limitations set forth in paragraph (a) of this section may be authorized upon a showing of unusual operational requirements which justify departure from those standards, provided that the interference potential to regular land-based operations would not be increased.
- (c) Mobile operations aboard aircraft in the services governed by this part, under licenses in effect September 14, 1973, may be continued without regard to provisions of paragraph (a) of this section, as follows:
- (1) Operations may be continued only for the balance of the term of such li-

censes if aircraft involved are regularly flown at altitudes greater than 1.6 km (1 mi) above the earth's surface.

- (2) Operations may be continued for one additional renewal license term if the aircraft involved are regularly flown at altitudes below 1.6 km (1 mi) above the earth's surface.
- (d) Operation of radiolocation mobile stations may be authorized without regard to limitations and conditions set forth in paragraphs (a), (b), and (c) of this section.

[43 FR 54791, Nov. 22, 1978, as amended at 58 FR 44960, Aug. 25, 1993]

§ 90.425 Station identification.

Stations licensed under this part shall transmit identification in accordance with the following provisions:

- (a) Identification procedure. Except as provided for in paragraphs (d) and (e) of this section, each station or system shall be identified by the transmission of the assigned call sign during each transmission or exchange of transmissions, or once each 15 minutes (30 minutes in the Public Safety Pool) during periods of continuous operation. The call sign shall be transmitted by voice in the English language or by International Morse Code in accordance with paragraph (b) of this section. If the station is employing either analog or digital voice scrambling, or nonvoice emission, transmission of the required identification shall be in the unscrambled mode using A3E, F3E or G3E emission, or International Morse, with all encoding disabled. Permissible alternative identification procedures are as follows:
- (1) A mobile relay stations call sign may be used to identify the associated control and mobile stations, except in the Public Safety Pool where the stations operate on frequencies below 450 MHz. Alternatively, a base station (including a mobile relay station) which is controlled by radio may be identified by the transmission of the call sign of the station at which communications originate.
- (2) One or more fixed relay stations may be identified by the transmission of the call signs of the stations at which the communications originate.